

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/051136

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 E05B65/20 E05B47/00 E05F15/16 B60J5/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 E05F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 149 969 A (MERITOR LIGHT VEHICLE SYSTEMS LTD) 31 October 2001 (2001-10-31) paragraph '0016!; figures 1-5	1-4,8
X	US 6 075 298 A (TILLI CHRISTOPHER R ET AL) 13 June 2000 (2000-06-13) column 4, line 38 - line 51; figure 2 column 6, line 4 - line 15; figure 8	1-4,8
X	US 5 920 158 A (FALCOFF MONTE L ET AL) 6 July 1999 (1999-07-06) column 6, line 20 - line 39; figure 16	1,2,8
X	US 4 478 004 A (ANDREI-ALEXANDRU MARCEL ET AL) 23 October 1984 (1984-10-23) the whole document	1,2,8
	----- -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

30 August 2004

Date of mailing of the international search report

09/09/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

PEREZ MENDEZ, J

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/051136

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 195 26 451 C (DAIMLER BENZ AG) 12 September 1996 (1996-09-12) column 3, line 13 - column 4, line 16; figures 1,2 -----	1,8
X	US 4 381 625 A (ANDREI-ALEXANDRU MARCEL ET AL) 3 May 1983 (1983-05-03) abstract; figures 1-18 -----	1,8
E	WO 2004/055310 A (ARMBRUSTER STEFAN ; KIEKERT AG (DE); KILL JUERGEN (DE); REDDMANN UWE () 1 July 2004 (2004-07-01) page 13, line 18 - page 14, line 16; figures 1-5 -----	1-4,8

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/051136

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1149969	A	31-10-2001	EP 1149969 A2	31-10-2001
			US 2001050496 A1	13-12-2001
US 6075298	A	13-06-2000	WO 9919967 A1	22-04-1999
US 5920158	A	06-07-1999	US 5841249 A	24-11-1998
			US 5694812 A	09-12-1997
			CA 2316354 A1	22-04-1999
			EP 1021323 A1	26-07-2000
			WO 9919180 A1	22-04-1999
			BR 9608154 A	24-08-1999
			CN 1182391 A	20-05-1998
			EP 0824423 A1	25-02-1998
			EP 0841230 A1	13-05-1998
			JP 11504795 T	27-04-1999
			US 5905345 A	18-05-1999
			WO 9633891 A1	31-10-1996
			US 6018223 A	25-01-2000
			US 5903114 A	11-05-1999
			US 5949206 A	07-09-1999
			BR 9608188 A	04-05-1999
			CN 1183082 A	27-05-1998
			DE 69609179 D1	10-08-2000
			EP 0824427 A1	25-02-1998
			JP 11505486 T	21-05-1999
			WO 9633893 A1	31-10-1996
			US 6126132 A	03-10-2000
			US 5916327 A	29-06-1999
			US 6116110 A	12-09-2000
US 4478004	A	23-10-1984	DE 3111633 A1	18-11-1982
			BR 8201636 A	16-02-1983
			FR 2503233 A1	08-10-1982
			GB 2095324 A ,B	29-09-1982
			IT 1150498 B	10-12-1986
			JP 57169184 A	18-10-1982
DE 19526451	C	12-09-1996	DE 19526451 C1	12-09-1996
US 4381625	A	03-05-1983	DE 2854713 A1	10-07-1980
			FR 2444778 A1	18-07-1980
			GB 2039597 A ,B	13-08-1980
			IT 1125939 B	14-05-1986
WO 2004055310	A	01-07-2004	DE 10258566 A1	08-07-2004
			WO 2004055310 A1	01-07-2004